

Confidential Claim Retracted

AUTHORIZED BY: SC

DATE: 5/14/13

Report of Investigation

Barrier Pillars for Ongoing Uranium
Mining Operations on Navajo and Laguna
Indian Lands in New Mexico

Federal regulations (30 CFR 231.32) require that boundary pillars no less than 50 feet thick be left at the boundaries of mining leases unless otherwise consented to or ordered in writing by the Area Mining Supervisor. This requirement is interpreted to apply to the external boundaries of each mining unit and not to the individual boundaries of numerous contiguous leases involved in each mining unit. The State of New Mexico has no boundary pillar requirements, but the State Mine Inspector recommends boundary pillar dimensions for each individual mining operation. The following is a summary of the boundary pillar situation at each mining operation in New Mexico that is under the jurisdiction of the Area Mining Supervisor, Southern Rocky Mountain Area.

The Anaconda Company, Jackpile-Paguete Minesite:

The Jackpile-Paguete Minesite occupies three contiguous Pueblo of Laguna leases, and boundary pillar requirements are therefore applicable to only the external boundaries of this mining unit. At the present time, we do not have mine maps of sufficient detail to verify that Anaconda is approaching a boundary pillar; however, indications are that such could be the case with the P-10 and PW2-PW3 underground mines. Furthermore, the approved P-15/17 and the proposed Gavilan Mesa underground mines could also involve boundary pillar situations. It is very doubtful, but not impossible, that any of the open-pit operations would ever involve boundary pillars, and no such instance is indicated by any of Anaconda's current open-pit mining projections. At this time, I believe it would be wise to remind Anaconda of the boundary pillar requirements, especially in regards to the P-10 and PW2-PW3 operations.

Cobb Nuclear Corporation, West Ranch Mine:

The West Ranch Mine involves one Navajo allotted lease, and boundary pillar requirements are applicable to only the north and west boundaries of that lease. The requirements were previously waived, and the boundary pillars breached, for the south and east sides of the lease when mining extended over those boundaries under past leases or agreements with private landowners. Although it is doubtful that mining will ever approach the north and west boundaries of the lease, I believe it advisable to notify Cobb Nuclear of the applicable requirements.

Gulf Mineral Resources Company, Mariano Lake Mine:

The Mariano Lake Mine involves three contiguous Navajo allotted leases, and the boundary pillar requirements are therefore applicable only to the external boundaries of this mining unit. As yet the mining operations have not approached these external boundaries, but I believe Gulf should be advised of the applicable requirements.



9404302

POL-EPA01-0005438

CONFIDENTIAL

Kerr-McGee Corporation, Church Rock I Mine:

The Church Rock I Mine involves three contiguous Navajo Tribal leases, and boundary pillar requirements are therefore applicable only to the external boundaries of the mining unit. As yet, the mining is far from approaching these external boundaries, but Kerr-McGee should be advised of the applicable requirements.

Koppen Mining Constructin Corporation, Section 6 Mine:

The Section 6 Mine involves three contiguous Navajo allotted leases which renders the boundary pillar requirements applicable to only the external boundaries of the mining unit. Koppen projects that mining could approach two of these external boundaries and should therefore be advised of the applicable requirements.

Ray Williams Mining Company, Enos Johnson Mine:

The Enos Johnson Mine occupies two contiguous Navajo Tribal leases, and boundary pillar requirements are henceforth applicable only to the external limits of the mining unit. The mine map in our files does not show the lease boundaries so it is not possible to determine if a boundary pillar situation is involved. I will investigate this matter further and advise Mr. Williams of the applicable requirements during my next inspection of the mining operation.

A handwritten signature in dark ink, appearing to read "Dale C. Jones", with a stylized flourish at the end.

Dale C. Jones
Mining Engineer